## Index of Claims

## \*10607249\*

| Application No. | Applicant(s)  |
|-----------------|---------------|
| 10/607,249      | MERKEL ET AL. |
| Examiner        | Art Unit      |
| Jason M. Groope | 1724          |

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|          | 21<br>22 | + | ╀        | ╀             | _ | ŀ | 4        | _        | +        |     | +        |          | ┞-           | 4        |          | +        |          |     |     |
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|          | 26       | + | ╁        | ⊢             | - | L | +        | _        | +        | _   | ╀        |          | L            | 4        |          | ╀        | -        |     |     |
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|          | 33       | + | H        | ├             | 4 | _ | +        |          | ╀        | _   | -        | _        | _            | +        | _        | -        | 4        |     | ŀ   |
| -+       | 34       | Н | Н        | -             | + | - | +        |          | ╀        |     | ╀        | $\dashv$ | _            | +        |          | L        | 4        | 4   | ŀ   |
| -+       | 35       | Н | Н        | <del> </del>  | + | _ | +        |          | ╀        | _   | H        | 4        |              | +        | _        | L        | $\dashv$ | H   | ŀ   |
|          | 36       | H | H        | _             | + |   | +        |          | ╁        |     | ┝        | 4        |              | ╀        | _        | $\vdash$ | _        |     | ŀ   |
|          | 37       | Н | ٦        | _             | + |   | +        | _        | ╀        | _   | ├        | 4        |              | ╀        | _        | ļ.,      | $\dashv$ | ir. | ŀ   |
|          | 38       | H | $\dashv$ |               | + | _ | +        |          | ╀        | _   | ┝        | 4        |              | ╀        | _        | ļ        | 4        |     |     |
| -+       | 39       | Н | $\dashv$ |               | + |   | +        |          | ╀        | -   | -        | +        | _            | ╀        | _        | H        | 4        | 1   | H   |
| -+       | 40       | H | $\dashv$ |               | + |   | ╀        | _        | ┝        | -   | -        | $\dashv$ | _            | ╀        | -        | _        | -        | ٠.  | -   |
| -+       | 41       | Н | 1        | _             | + | _ | ╀        | _        | ⊦        | -   | _        | 4        |              | ╀        | -        | _        | 4        |     | -   |
| $\dashv$ | 42       | H | -        |               | ╁ | _ | ╀        | _        | ┞        | -   | _        | +        |              | ╀        | 4        | _        | 4        | in. | _   |
| -+       | 43       | H | +        |               | ╁ |   | ╀        | _        | $\vdash$ | 4   | _        | +        |              | ╀        | -1       | _        | 4        |     | _   |
| $\dashv$ | 44       | H | +        | _             | + | _ | +        | -        | -        | 4   | _        | +        | _            | $\vdash$ | -        | _        | 4        |     | _   |
| $\dashv$ | 45       | Н | 4        | _             | ╀ | _ | ╀        | _        | $\vdash$ | 4   | _        | +        |              | L        | 4        |          | -        |     |     |
| -+       | 46       | H | +        | _             | 1 |   | -        | _        | L        | 4   | _        | 4        |              | -        | 4        | _        | 4        | 1   | _   |
| -+       | 47       | + | +        |               | + | _ | 1        | 4        | L        | 4   | _        | +        | _            | 1        | 4        |          | 4        | -   |     |
| $\dashv$ | 48       | + | +        | _             | ╀ |   | ⊦        | 4        | _        | 4   | _        | +        |              | $\vdash$ | -+       | _        | 4        |     |     |
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|             |          | 51   | ī.         | 7            |              | T        |          |              | 1 |    | _         | Ť |          |           | 十         |
| - 1         |          | 52   | 2          | 7            |              | T        |          |              | T |    |           | T |          |           | T         |
| . ,         |          | 53   | 3]         | T            |              | T        |          |              | 1 |    | ļ _       | T |          |           | Ť         |
| 1           |          | 54   | ī          | T            |              | T        |          |              | T |    | 1         | Ť |          |           | T         |
| u.".        |          | 55   | ;          | Τ            |              | T        |          |              | T |    | _         | T | П        | _         | T         |
| 1           |          | 56   | ; ]        | T            |              | T        |          |              | T |    | Г         | † |          |           | †         |
|             |          | 57   | 7          | П            |              | T        |          |              | T |    |           | T |          | _         | T         |
|             |          | 58   |            | П            |              | Т        | T        |              | 1 |    |           | Ť | ٦        |           | T         |
|             |          | 59   | П          | П            |              |          | ٦        |              | T |    |           | T | 7        |           | T         |
| ***         |          | 60   | 1          | П            |              | T        |          |              | T |    |           | T |          | _         | T         |
|             |          | 61   |            |              |              | Т        |          |              | T |    |           | Τ | 7        |           | T         |
|             |          | 62   |            | П            |              |          |          |              | T |    |           | T | 7        |           | T         |
| Z.          | L        | 63   |            |              | _            | Γ        | 1        |              | Γ | ٦  |           | T | 1        | _         | T         |
| 1 1         |          | 64   | $\prod$    |              | _            | Γ        |          | _            | Γ |    | _         | T | 7        |           | T         |
| #- 3<br>- 3 |          | 65   | $\prod$    |              | _            | Γ        | Ţ        |              | ŀ |    |           | Γ | 7        |           | Τ         |
| - 46        |          | 51<br>52<br>53<br>54<br>55<br>56<br>57<br>58<br>60<br>61<br>62<br>63<br>64<br>65<br>66 | $\prod$    |              |              |          | J        | _            |   | 1  |           | T | 7        |           | Τ         |
|             | <u> </u> | 67<br>68   | $\prod$    |              |              | $\Gamma$ | _        |              | Γ | _1 |           | Γ | _        |           | Г         |
| 140         |          | 68   | 1          |              |              |          |          |              |   |    |           |   | I        |           |           |
| 4           |          | 1 69   | 1          | $\perp$      |              |          |          |              | L |    |           |   | T        |           |           |
|             |          | 70<br>71   | 1          | $\perp$      | _            | L        | 1        |              |   |    |           |   | $\Box$   |           | Γ         |
| . 9         |          | 71   | 4          | $\perp$      |              | L        | 1        |              | L |    |           |   |          |           |           |
|             |          | 72   | Щ          | 4            |              | L        | 1        |              | L | _  |           |   | I        |           |           |
| 7           |          | 73   | 1          |              |              | L        | 1        |              | L | 1  |           | L | $\perp$  |           |           |
|             |          | 72<br>73<br>74<br>75<br>76<br>77<br>78<br>79<br>80<br>81<br>82<br>83<br>84<br>85<br>86 | $\perp$    | 4            | _            |          | 1        |              |   | 1  |           | L | 1        |           |           |
|             |          | 75   | ╀          | -            | _            | _        | 1        |              |   | 4  |           |   | $\perp$  |           | _         |
|             |          | 76   | <b>Ļ</b> . | 4            | 4            |          | 4        |              | _ | 4  |           |   | 4        |           | L         |
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|             |          | 1 78   | +          | +            | 4            |          | +        | 4            | _ | 4  | _         |   | 1        |           |           |
|             | ·        | 79   | ╀          | 4            | _            |          | 4        | 4            | _ | 4  | _         |   | 1        |           |           |
|             |          | 80   | ╀          | +            | 4            | _        | +        | -1           | _ | 1  | 4         | _ | 1        | _         |           |
|             |          | 81   | ╁          |              | -            |          | +        |              |   | 4  |           |   | ╀        | _         | _         |
| ŀ           |          | 02   | +-         |              | -            |          | ╀        | -            | _ | +  | _         |   | +        | 4         |           |
| 1           |          | 94   | ╁╌         | +            | $\dashv$     | _        | ╀        | -            | _ | ╀  | 4         |   | ╀        | -4        | _         |
|             |          | 85   | +-         | +            | $\dashv$     |          | ╀        | $\dashv$     | _ | +  | -         |   | ╀        | -         |           |
|             |          | 86   | ┢          | +            | +            |          | ╁        | +            | _ | ╀  | +         | _ | ╀        | -         | _         |
| 2           |          | 87   | +          | +-           | +            |          | ╁        | ᆉ            | _ | +  | +         |   | ╁        | +         | _         |
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| +           | _        | 88<br>89   | t-         | +            | +            |          | t        | +            | _ | ╁  | +         |   | ╁        | +         | -         |
| T           |          | 90   | Н          | ╁            | $\dagger$    | _        | ┢        | +            | _ | ╁  | +         | _ | ╁        | ┪         | _         |
| ŀ           |          | 90<br>91   | Ι-         | T            | +            | _        | t        | +            |   | t  | +         |   | ╁        | +         | -         |
|             |          | 92   |            | $^{\dagger}$ | $^{\dagger}$ | _        | t        | +            | _ | +  | +         | _ | $\vdash$ | +         | $\dashv$  |
| ş   T       |          | 93   | $\vdash$   | +            | +            |          | T        | $^{\dagger}$ | _ | ✝  | +         |   | 1        | +         | $\dashv$  |
|             |          | 94   |            | $^{\dagger}$ | $\dagger$    | _        | H        | $\dagger$    |   | T  | +         |   | H        | +         | $\dashv$  |
| ijĖ         |          | 95   |            | T            | T            | _        | $\vdash$ | $^{\dagger}$ | _ | 1  | +         | _ | †        | +         | -         |
|             |          | 96   |            |              | 1            | _        |          | †            |   | T  | 十         |   | _        | +         | $\dashv$  |
|             |          | 97   |            | T            | 1            |          | Г        | $\top$       |   | Γ  | $\dagger$ |   | _        | $\dagger$ | ヿ         |
| 2           |          | 98   |            | Ι            |              |          |          | 1            |   | Γ  | 1         |   |          | 1         | ヿ         |
|             |          | 99   |            | Γ            |              |          |          | T            |   |    | T         |   | _        | T         | $\exists$ |
| L           | I        | 100  |            |              | Ι            |          |          | $\perp$      |   |    | Ι         |   |          | T         |           |

| CI            | aim        | T        | Date |   |    |   |          |   |           |          |   |              |           |           |          |   |
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|               | 101        | +        | 4    |   | 4  |   | Ļ        |   | L         | 4        |   | $\downarrow$ |           | L         | 4        |   |
|               | 102        | +        | 4    |   | +  |   | ╀        |   | L         | 4        |   | Ļ            | _         | _         | 1        | _ |
|               | 103        | ╀        | 4    | - | +  |   | ╀        | _ | L         | +        |   | ╀            | _         | L         | 1        |   |
|               | 104<br>105 | ╀        | +    | _ | +  | _ | ╀        |   | H         | 4        |   | Ł            | -         | _         | Ł        | - |
|               | 105        | ┿        | +    | _ | +  |   | ╀        | _ | -         | +        |   | ╀            | 4         | _         | ╀        | _ |
|               | 107        | ╁╴       | +    | _ | +  | _ | ╁        | _ | -         | +        |   | ╀            | $\dashv$  |           | +        | _ |
|               | 108        | +        | 1    | _ | ╁  | _ | ╁        |   | -         | $^{+}$   | - | H            | +         | _         | ╁        | ٦ |
|               | 109        | T        | †    |   | †- | _ | ╁        |   | -         | $^{+}$   | _ | t            | 7         | -         | 十        | ٦ |
|               | 110        | Т        | 1    | _ | Ť  |   | T        |   |           | +        |   | T            | 7         | _         | +        | ٦ |
|               | 111<br>112 |          | Ī    |   | T  |   | Γ        |   | _         | T        |   | Γ            | 1         |           | T        |   |
|               | 112        | L        |      |   |    |   |          |   |           | Ι        |   |              |           |           | T        | ٦ |
|               | 113        | L        | 1    | _ | Ĺ  |   | L        |   |           |          |   |              | I         |           |          | ٦ |
|               | 114<br>115 | ļ        | 1    |   | L  | _ | L        | ╝ |           |          |   |              |           |           | L        | 7 |
|               | 115        | L        | 1    |   | L  |   | L        | 4 |           | 1.       |   | L            | 1         | _         |          |   |
|               | 116        | L        | 4    |   | L  | _ | L        | 4 | _         | 1        | _ |              | 1         | _         | L        | ⅃ |
|               | 117        | -        | +    | _ | 4  | - | -        | 4 | _         | 4-       |   | _            | 4         |           |          | 4 |
| _             | 118        | -        | ╀    |   | ╀  | _ |          | 4 |           | ╀        | _ | _            | +         |           | L        | 4 |
|               | 119<br>120 | ╁        | ╀    |   | ╀  | 4 | _        | + | _         | +-       | _ | _            | +         | _         | -        | 4 |
| $\neg$        | 121        | ┢        | ╁    | _ | ╁  | - | _        | + | _         | ╀        | - | _            | +         |           | H        | 4 |
| $\neg$        | 122        | -        | t    | _ | -  | 1 | -        | ╁ | -         | ╁╴       | ┥ | -            | ╁         |           | -        | - |
|               | 122<br>123 | -        | t    | - | -  | 1 |          | † | -         | ╁        | + | _            | $^{+}$    | _         | ┝        | ┨ |
|               | 124<br>125 | -        | t    | _ | T  | 1 |          | † | _         | t        | 1 | _            | $\dagger$ | -         | -        | ┨ |
|               | 125        |          | t    | _ |    | 1 | _        | † | _         | 1        | 1 | _            | $\dagger$ |           |          | 1 |
|               | 126        |          | Γ    |   |    | 7 |          | Ť |           | 1        | 1 |              | T         |           | -        | 1 |
|               | 127<br>128 |          |      |   |    |   |          | Ι |           |          |   |              | T         |           |          | 7 |
|               | 128        |          | L    |   | L  | 1 |          | I |           |          | I |              | Ι         |           |          | ] |
|               | 129<br>130 |          | L    |   |    | 4 |          | 1 | _         | L        | 1 |              |           |           |          | ] |
|               | 130        |          | L    | _ | _  | 1 | _        | 1 |           | L        | 4 | _            | L         |           |          | 1 |
|               | 131        | _        | L    | 4 | _  | 4 | _        | ļ |           | L        | 4 | _            | Ļ         | _         |          |   |
|               | 132<br>133 |          | L    | 4 | _  | + |          | Ļ | _         | L        | 4 |              | Ļ         | -         |          | 1 |
|               | 134        |          | ⊦    | - | _  | + | _        | ╀ | _         | <u> </u> | + |              | ╀         | 4         |          | 1 |
| -             | 135        |          | H    | ┥ | _  | + |          | ╁ | -         | ┝        | + | _            | ⊦         | -         | _        | ł |
| $\neg \vdash$ | 136        |          | -    | + | _  | t | _        | t | -         |          | + | _            | ┝         | $\dashv$  |          | 1 |
|               | 137        |          | -    | T |    | t |          | t | ٦         | -        | t | _            | ┝         | 7         |          | 1 |
|               | 138        |          |      | 7 |    | T |          | T |           | _        | Ť | _            | T         | 7         |          | 1 |
|               | 139        |          |      |   |    | Ţ |          |   |           |          | T |              | Γ         | 7         |          | 1 |
| _ _           | 140        |          | _    | ⇃ |    | L |          |   |           |          | I |              |           |           |          |   |
|               | 141        | 4        | _    | 4 |    | Ļ |          | L | _         |          | L |              | L         | 1         | _        | l |
|               | 142        | -        | _    | 4 |    | Ļ |          | L | 4         |          | ╀ | _            |           |           |          |   |
| -             | 143<br>144 |          |      | 4 |    | ŀ | _        | L | 4         |          | ╀ | _            | _         | 4         | _        |   |
|               | 144        | -        |      | + | _  | ┞ | -        | _ | 4         |          | + | -            | _         | +         |          |   |
|               | 146        | $\dashv$ | _    | + | _  | Ͱ | $\dashv$ | - | +         | _        | + | 4            | _         | +         | _        |   |
|               | 147        | ٦ĺ       | -    | + |    | 1 | $\dashv$ | - | +         |          | + | +            | _         | +         | -        |   |
|               | 48         | +        | _    | † | -  | H | -        | _ | $\dagger$ |          | t | -            |           | +         | $\dashv$ |   |
|               | 49         | $\dashv$ |      | t | _  | r | 7        |   | 1         | _        | t | 1            |           | $\dagger$ | $\neg$   |   |
|               | 50         |          | _    | Ť |    | Γ | 7        | _ | †         |          | Τ | 7            | _         | $\dagger$ | ᅱ        |   |
|               |            |          |      | • | _  | _ | _        |   |           |          | _ |              | _         | _         |          |   |